

Title (en)

ADDITION OF BIODEGRADABILITY LENDING ADDITIVES TO PLASTIC MATERIALS

Title (de)

ZUSATZ VON BIOLOGISCHE ABBAUBARKEIT VERLEIHENDEN ADDITIVEN ZU KUNSTSTOFFEN

Title (fr)

AJOUT D'ADDITIFS CONFÉRANT UNE BIODÉGRADABILITÉ À DES MATIÈRES PLASTIQUES

Publication

EP 3784732 A1 20210303 (EN)

Application

EP 19793589 A 20190423

Priority

- US 201862661387 P 20180423
- US 2019028733 W 20190423

Abstract (en)

[origin: WO2019209834A1] Described herein are methods for rendering biodegradable a plastic material that is not itself biodegradable, by blending the plastic material with a carbohydrate-based polymeric material that is formed from a) one or more starches and a plasticizer (e.g., glycerin), b) an additive known in the art as an OXO material and/or an additive that interacts with microbes that contribute to biodegradation of the non-biodegradable material. The carbohydrate-based polymeric material is less crystalline than the non-biodegradable materials, e.g., being substantially amorphous, and having a crystallinity of no more than 20%. When tested under conditions causing biodegradation, the blend biodegrades to an extent greater than the content of the carbohydrate-based polymer.

IPC 8 full level

C08L 23/06 (2006.01); **C08L 83/04** (2006.01)

CPC (source: EP KR)

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C08L 23/06 (2013.01 - EP); **C08L 83/04** (2013.01 - EP); **C08L 101/00** (2013.01 - KR); **C09D 183/04** (2013.01 - EP); **C09J 183/04** (2013.01 - EP);
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Designated contracting state (EPC)

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Designated extension state (EPC)

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